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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,904	11/13/2003	David J. Baker	25090A	9434
22889	7590	01/25/2008		
OWENS CORNING 2790 COLUMBUS ROAD GRANVILLE, OH 43023			EXAMINER HALPERN, MARK	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/712,904	Applicant(s) BAKER ET AL.	
	Examiner Mark Halpern	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,27-32 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18,27-32,34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/8/07, 8/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1) Acknowledgement is made of Amendment received 8/8/2007.

Claims 1, 12, 15, 27, 29, 31 and 37 are amended.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 2) Claims 1, 3-8, 12-13, 15-17, 27-32, are rejected under 35 U.S.C. 102(b) as being anticipated by Shepherd (3,592,623). Shepherd discloses a glass melting furnace.

As shown in Figures 1-4, the furnace is an elongated channel and includes an upstream end, a downstream end, two side walls a floor and a roof. The downstream end is near the fining zone 17. The exhaust stack is located at the downstream end, and is

located downstream of all the burners, and is in communication with the downstream end of the furnace. The upstream end and the downstream end are configured to allow unimpeded flowing and blending of the glass-forming material. The charge entry of melting materials 25 is located at the upstream end. The burners 30, 31, 65 are located at the upstream end. Exhaust is positioned to allow exhaust gases to provide additional heat to the melting glass-forming materials (col. 2, line 62 to col. 9, line 49, Figs. 1-5). Exhaust is a plurality of exhaust stacks as shown in Fig. 1.

3) Claims 2, 10-11, 18, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Pflugl (5,925,165).

Claim 2: Shepherd is applied as above for claim 1, Shepherd fails to disclose burner mounted in the roof of the furnace. Pflugl discloses glass melting furnace having multiple burners 9, 10, located and mounted in the roof of the furnace (col. 3, line 18 to col. 4, line 46 and Figures 1, 2). It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Shepherd and Pflugl, because such a combination would provide for a more even heating of the melted material in the furnace of Shepherd.

Claims 10-11, 18: Pflugl glass melting furnace has exhaust ducts 25, 38 located downstream of all of burners (col. 3, line 18 to col. 4, line 46 and Figures 1, 2).

4) Claims 9, 14, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Hoke (6,519,973). Shepherd is applied as above for claims 1, 12, Shepherd does not disclose that the exhaust is located at a sidewall of the furnace. Hoke discloses a glass melting furnace where exhausts 145, 147, are located at

sidewalls of the furnace as shown in Figure 7. It would have been obvious, to one skilled in the art at the time the invention was made, to combine the teachings of Shepherd and Hoke, because such a combination would improve glass quality in the design of Shepherd as disclosed by Hoke (Abstract).

5) Claims 34-37, are rejected under 35 U.S.C. 103(a) as being unpatentable over Shepherd in view of Simpson (US 2001/0039813) or LeBlanc (6,237,369). Shepherd is applied as above for claim 1, Shepherd does not disclose further a burner supplying heat to downstream fining end. Simpson and/or LeBlanc disclose a glass melting furnace, where a burner is installed in the roof of the furnace supplying heat toward downstream end of the furnace. The burner is mounted at an angle about 20 degrees to the vertical. See Figures 2A, 3, 5, 7 of Simpson. See Figures 1-3, of LeBlanc. It would have been obvious to combine the teachings of Shepherd and Simpson and/or LeBlanc, because such a combination would permit melting control in the furnace of Shepherd.

Response to Amendment

6) Claims 1, 3-6, 8, 12-13, 15-17, 27-32 rejection under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Van Dornick, is withdrawn in view of amended claims and further search of art in prior art.

7) Claims 2, 7, 10-11, 18 rejection under 35 U.S.C. 103(a) as being unpatentable over Van Dornick in view of Pflugl, is withdrawn in view of amended claims and further search of art in prior art.

- 8) Claims 9, 14 rejection under 35 U.S.C. 103(a) as being unpatentable over Van Dornick in view of Hoke, is withdrawn in view of amended claims and further search of art in prior art.
- 9) Claims 34-37 rejection under 35 U.S.C. 103(a) as being unpatentable over Van Dornick in view of Simpson or LeBlanc, is withdrawn in view of amended claims and further search of art in prior art.
- 10) Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 11) Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number:
10/712,904
Art Unit: 1791

Page 6

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Halpern whose telephone no. is 571-272-1190.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

/Mark Halpern/
Primary Examiner
Art Unit 1791